

PATENT COOPERATION TREATY

PCT

NOTIFICATION OF ELECTION

(PCT Rule 61.2)

From the INTERNATIONAL BUREAU

To:

Assistant Commissioner for Patents
United States Patent and Trademark
Office
Box PCT
Washington, D.C.20231
ÉTATS-UNIS D'AMÉRIQUE

in its capacity as elected Office

Date of mailing (day/month/year)

11 November 1999 (11.11.99)

International application No.

PCT/US99/05978

Applicant's or agent's file reference

1807.007PC01

International filing date (day/month/year)

19 March 1999 (19.03.99)

Priority date (day/month/year)

20 March 1998 (20.03.98)

Applicant

JAMMAL, Shahnaz et al

1. The designated Office is hereby notified of its election made:



in the demand filed with the International Preliminary Examining Authority on:

14 October 1999 (14.10.99)



in a notice effecting later election filed with the International Bureau on:

2. The election ☒ was

was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

The International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland

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Authorized officer

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PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

REC'D 03 JUL 2000

WIPO

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(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 1807.007PC01	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/US99/05978	International filing date (day/month/year) 19 MARCH 1999	Priority date (day/month/year) 20 MARCH 1998
International Patent Classification (IPC) or national classification and IPC IPC(7): G06F 157.00 and US Cl.: 705/38		
Applicant IQ FINANCIAL SYSTEMS, INC.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 4 sheets.
- ☐ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority. (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).
- These annexes consist of a total of 0 sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of report with regard to novelty, inventive step or industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand 14 OCTOBER 1999	Date of completion of this report 30 MAY 2000
Name and mailing address of the IPEA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231	Authorized officer FRANTZY POINVIL <i>For Eugenia Ziegler</i>
Facsimile No. (703) 305-3230	Telephone No. (703) 305-9779

I. Basis of the report

1. This report has been drawn on the basis of *(Substitute sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to the report since they do not contain amendments):*

☒ the international application as originally filed.

☒ the description, pages 1-30 , as originally filed.

pages NONE , filed with the demand.

pages NONE , filed with the letter of _____.

pages _____ , filed with the letter of _____.

☒ the claims, Nos. 1-24 , as originally filed.

Nos. NONE , as amended under Article 19.

Nos. NONE , filed with the demand.

Nos. NONE , filed with the letter of _____.

Nos. _____ , filed with the letter of _____.

☒ the drawings, sheets/fig 1-13 , as originally filed.

sheets/fig NONE , filed with the demand.

sheets/fig NONE , filed with the letter of _____.

sheets/fig _____ , filed with the letter of _____.

2. The amendments have resulted in the cancellation of:

☒ the description, pages NONE .

☒ the claims, Nos. NONE .

☒ the drawings, sheets/fig NONE .

3. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box Additional observations below (Rule 70.2(c)).

4. Additional observations, if necessary:

NONE

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**1. STATEMENT**

Novelty (N)	Claims <u>2-7, 9-17, 19 AND 21-24</u>	YES
	Claims <u>1, 8, 10, 18 AND 20</u>	NO
Inventive Step (IS)	Claims <u>2-7, 9, 11-17, 21-22 AND 24</u>	YES
	Claims <u>1, 8, 10, 18-20 AND 23</u>	NO
Industrial Applicability (IA)	Claims <u>1-24</u>	YES
	Claims <u>NONE</u>	NO

2. CITATIONS AND EXPLANATIONS

Claims 1, 8, 18 and 20 lack novelty under PCT Article 33(2) as being anticipated by Dykstra et al.

As per claims 1 and 20, Dykstra et al discloses a credit evaluation and loan processing system having computer code means for performing credit evaluation. The system comprises receiving first inputs indicative of whether a borrower has previously defaulted on financial obligation and second inputs comprising a plurality of credit factors indicative of the ability of the borrower to repay a financial obligation in the predefined market from the credit bureau computers. Note column 4, line 41 to column 6, line 43. Determining a set of weights to be placed on each of the plurality of credit factors and calculating using the plurality of credit factors and the set of weights a probability of default to the borrower is taught on column 6, lines 4-41 of Dykstra et al.

As per claim 8, the system of Dykstra et al uses computer modeling and scoring models using iteration for producing new calculated values. Note also column 6, lines 4-41.

Claim 18 is a system claim drafted in means plus function format. The claimed functions are obvious over the same reasoning applied to claim 1 above. Claim 18 further recites a general database that contains a record for each borrower wherein the record includes the corresponding ones of the plurality of weights, the plurality of inputs and the plurality of second inputs for each borrower. As per these limitations, applicant is directed to column 5, lines 41-66 of Dykstra et al.

Claims 10, 19 and 23 lack an inventive step under PCT Article 33(3) as being obvious over Dykstra et al.

The teachings of Dykstra et al are discussed above. As per claims 10, 19 and 23, Potter et al teaches outputting the probability of default for each of the borrowers. Note column 7, lines 8-40. Having a graphical output would have been obvious to the skilled artisan with the motivation of providing applicant a visual appearance or reason as to why he/she has been approved or denied.

Claims 2-7, 9, 11-17, 21-22 and 24 meet the criteria set out (Continued on Supplemental Sheet.)

Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: Boxes I - VIII

Sheet 10

V. 2. REASONED STATEMENTS - CITATIONS AND EXPLANATIONS (Continued):
in PCT Article 33(2)-(4), because:

the prior art does not teach or fairly suggest setting each of the set of weights to a new calculated value when determining the level of fitness is not a good fit as recited in claim 2.

The prior art taken alone or in combination fails to teach or suggest using the value as input into Equation (1) to calculate the probability of default for the borrower as recited in claim 9.

The prior art taken alone or in combination fails to teach or suggest generating a new set of weights to be placed on each of the plurality of credit factors as recited in claim 11.

The prior art taken alone or in combination fails to teach or suggest code means for causing the computer to set each of the set of weights to a new calculated value when the eighth code means determines the level of fitness is not a good fit as recited in claim 21.

The prior art taken alone or in combination fails to teach or suggest means for causing the computer to use the value as input into Equation (1) to calculate the probability of default for the borrower as recited in claim 22.

The prior art taken alone or in combination fails to teach or suggest means for causing the computer to generate when sixth computer readable code means determines that the set of weights are unstable, a new set of weights to be placed on each of the plurality of credit factors as recited in claim 24.

----- NEW CITATIONS -----

NONE

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US99/05978

A. CLASSIFICATION OF SUBJECT MATTER

IPC(6) : GO6F 157:00

US CL : 705/38

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 705/38-40

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,611,052 A (DYKSTRA ET AL.) 11 MARCH 1997, COLUMN 4, LINE 41 TO COLUMN 6, LINE 43.	1, 2, 8, 18-21 AND 23
A	US 5,239,462 A (JONES ET AL.) 24 AUGUST 1993, COLUMN 6, LINE 49 TO COLUMN 7, LINE 30.	1, 2, 8, 18-21 AND 23
A	US 5,262,941 A (SALADIN ET AL.) 16 NOVEMBER 1993, COLUMN 8, LINES 40-60.	1, 2, 8, 18-21 AND 23

☐ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

* Special categories of cited documents:	* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
A document defining the general state of the art which is not considered to be of particular relevance	*X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
E earlier document published on or after the international filing date	*Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
L document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	*Z* document member of the same patent family
O document referring to an oral disclosure, use, exhibition or other means	
P document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search

30 APRIL 1999

Date of mailing of the international search report

20 MAY 1999

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